

APR 07 2008



FORM PTO-1449		ATTY. DOCKET NO. I-2-0455.1US	SERIAL NO. 10/791,244
U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		APPLICANT Yang et al.	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		FILING DATE March 2, 2004	GROUP 2611
(Use several sheets if necessary)			

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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/JATM/	5,412,620	05/1995	Cafarella et al.			1
	5,487,069	01/1996	O'Sullivan et al.			2
	5,559,757	09/1996	Catipovic et al.			3
	5,577,066	11/1996	Schuchman et al.			4
	5,612,978	03/1997	Blanchard et al.			5
	5,805,638	09/1998	Liew			6
	5,818,868	10/1998	Gaudenzi et al.			7
	5,828,658	10/1998	Ottersten et al.			8
	5,930,369	7/1999	Cox et al.			9
	6,047,020	04/2000	Hottinen			10
	6,097,753	08/2000	Ko			11
	6,128,276	10/2000	Agree			12
	6,137,848	10/2000	Chennakeshu et al.			13
	6,141,393	10/2000	Thomas et al.			14
	6,144,711	11/2000	Raleigh et al.			15
	6,181,714	01/2001	Isaksson et al.			16
	6,188,717	02/2001	Kaiser et al.			17
	6,219,561	04/2001	Raleigh			18
	6,289,005	09/2001	Katz			19
	6,321,066	11/2001	Katz et al.			20
	6,321,082	11/2001	Katz			21
	6,320,903	11/2001	Isaksson et al.			22
	6,359,926	03/2002	Isaksson et al.			23
↓	6,359,938	03/2002	Keevill et al.			24
/JATM/	6,363,128	03/2002	Isaksson et al.			25

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/JATM/	6,366,554	04/2002	Isaksson et al.			26
	6,377,632	04/2002	Paulraj et al.			27
	6,392,595	05/2002	Katz et al.			28
	6,396,801	05/2002	Upton et al.			29
	6,438,174	08/2002	Isaksson et al.			30
	6,445,342	09/2002	Thomas et al.			31
	6,456,649	09/2002	Isaksson et al.			32
	6,466,629	10/2002	Isaksson et al.			33
	6,473,449	10/2002	Cafarella et al.			34
	6,473,453	10/2002	Wilkinson			35
	6,493,395	12/2002	Isaksson et al.			36
	6,505,053	01/2003	Winters et al.			37
	6,512,737	01/2003	Agee			38
	6,538,986	03/2003	Isaksson et al.			39
	6,553,012	04/2003	Katz			40
	6,611,855	08/2003	Hellberg et al.			41
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	6,680,969	01/2004	Molnar et al.			45
	6,662,024	12/2003	Walton et al.			46
	6,671,334	12/2003	Kuntz et al.			47
	6,674,795	01/2004	Liu et al.			48
	6,684,065	01/2004	Bult et al.			49
▼	6,693,953	02/2004	Cox et al.			50
/JATM/	6,700,919	03/2004	Papasakellarious			51

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JATM/	6,724,743	04/2004	Pigeonnat			52
	6,729,929	05/2004	Sayers et al.			53
	6,744,320	06/2004	Nguyen et al.			54
	6,745,352	06/2004	Cheng			55
	2002/0136158	09/2002	Frank			56
	2002/145989	10/2002	De Parthapratim et al.			57
	2003/0026201	02/2003	Amesen			58
	2003/0035491	02/2003	Walton et al.			59
	2003/0043732	03/2003	Walton et al.			60
	2003/0043767	03/2003	Pan et al.			61
	2003/0043887	03/2003	Hudson			62
	2003/0043925	03/2003	Stopler et al.			63
	2003/0048856	03/2003	Ketchum et al.			64
	2003/0058952	03/2003	Webster et al.			65
	2003/0063557	04/2003	Mottier			66
	2003/0072291	04/2003	Brunel			67
	2003/0076908	04/2003	Huang et al.			68
	2003/0076900	04/2003	Magee et al.			69
	2003/0081781	05/2003	Jensen et al.			70
	2003/0086366	05/2003	Branlund et al.			71
	2003/0099216	05/2003	Nilsson et al.			72
	2003/0103584	06/2003	Bjerke et al.			73
	2003/0108117	06/2003	Ketchum et al.			74
	2003/0112880	06/2003	Walton et al.			75
V	2003/0123384	07/2003	Agee			76
JATM/	2003/0125040	07/2003	Walton et al.			77

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/JATM/		2003/0128658	07/2003	Walton et al.			78
		2003/0129984	07/2003	Dent			79
		2003/0133403	07/2003	Castelain et al.			80
		2003/0147655	08/2003	Shattil			81
		2003/0152021	08/2003	Wang et al.			82
		2003/0165131	09/2003	Liang et al.			83
		2003/0185310	10/2003	Ketchum et al.			84
		2003/0210752	11/2003	Krupka			85
		2003/0215007	11/2003	Mottier			86
		2003/0216154	11/2003	Mennenga et al.			87
		2003/0227866	12/2003	Yamaguchi			88
		2003/0235255	12/2003	Ketchum et al.			89
		2004/0032354	02/2004	Knobel et al.			90
		2004/0032918	2/2004	Shor et al.			91
		2004/0052236	03/2004	Hwang et al.			92
		2004/0086027	05/2004	Shattil			93
		2004/0086035	05/2004	Upton et al.			94
		2004/0087275	05/2004	Sugar et al.			95
		2004/0095907	05/2004	Agee et al.			96
		2004/0100897	05/2004	Shattil			97
		2004/0101046	05/2004	Yang et al.			98
		2004/0116077	06/2004	Lee et al.			99
		2004/0120274	06/2004	Petre et al.			100
		2004/0120424	06/2004	Roberts			101
	↓	2004/0136399	07/2004	Roberts			102
/JATM/		2004/0141548	07/2004	Shattil			103

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JATM/		2004/0142663	07/2004	Roberts				104
JATM/		2004/0146024	07/2004	Li et al.				105
JATM/		2004/0240595	12/2004	Raphaeli				106

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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
JATM/		0766468	04/1997	EP				107
		1017183	07/2000	EP				108
		1047209	10/2000	EP				109
		1063780	12/2000	EP				110
		1119146	07/2001	EP				111
*		1100000	10/2001	EP 1139623				112
		1175022	01/2002	EP				113
		1255387	11/2002	EP				114
		1289182	03/2003	EP				115
		1300999	04/2003	EP				116
		1303094	04/2003	EP				117
		1357693	10/2003	EP				118
		1365554	11/2003	EP				119
		1379020	01/2004	EP				120
		1411693	04/2004	EP				121
*		1992-0009249	05/1992	KR			X**	122
*		1998-702348	07/1998	KR			X**	123
▼	*	20000027178	05/2000	KR			X**	124
JATM/	*	2003-0034260	05/2003	KR			X**	125

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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION		126
							YES	NO	
/JATM/		95/22859	08/1995	WO					126
		95/27349	10/1995	WO					127
		96/22638	07/1996	WO					128
		97/34421	09/1997	WO					129
		97/35384	09/1997	WO					130
		97/48192	12/1997	WO				X	131
		98/09395	03/1998	WO					132
		98/10545	03/1998	WO					133
		98/10549	03/1998	WO					134
		98/10550	03/1998	WO					135
		98/10552	03/1998	WO					136
		98/10553	03/1998	WO					137
		98/10554	03/1998	WO					138
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		98/18272	04/1998	WO					140
		98/36596	08/1998	WO					141
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		98/36599	08/1998	WO					143
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		99/49602	09/1999	WO					145
		99/62280	12/1999	WO					146
		00/11823	03/2000	WO					147
		00/52872	09/2000	WO					148
V		01/10065	02/2001	WO					149
/JATM/		01/33761	05/2001	WO					150

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							YES	NO
JATM/		01/33791	05/2001	WO				
		01/47202	06/2001	WO				
		01/47203	06/2001	WO			X	
		01/53932	07/2001	WO				
		01/54300	07/2001	WO				
		01/54305	07/2001	WO				
		02/29977	04/2002	WO				
		02/054601	07/2002	WO				
		02/054537	07/2001	WO				
		02/061962	08/2002	WO				
		02/067527	08/2002	WO				
		02/073937	09/2002	WO				
		02/080483	10/2002	WO				
		WO/082683	10/2002	WO				
		02/082683	10/2002	WO				
		02/093779	11/2002	WO				
		02/093784	11/2002	WO				
		02/093819	11/2002	WO				
		03/005291	01/2003	WO				
		03/010898	02/2003	WO				
		03/015292	02/2003	WO				
		03/026237	03/2003	WO				
		03/028270	04/2003	WO				
		03/044983	05/2003	WO				
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							YES	NO
/JATM/		03/084092	10/2003	WO				
		03/092212	11/2003	WO				
		2004/002047	12/2003	WO				
		2004/003743	01/2004	WO				
		2004/008704	01/2004	WO				
		2004/023704	03/2004	WO				
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		2004/038984	05/2004	WO				
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EXAMINER INITIAL	DESCRIPTION (Including Author, Title, Date, Pertinent Pages, Etc.)	
/JATM/	"Fast Algorithm for Solving Toeplitz Systems of Equations" _IBM Technical Disclosure Bulletin, May 1980, US, Vol. 22. No. 12. 2 pages	188
	BENVENUTO, "Joint Detection with Low Computational Complexity for Hybrid TD-CDMA Systems," VTC 1999, Fall IEEE VS 50 th Vehicular Technology Conference, Volume 1, September 19-22, 1999, vol.1, pp. 618-622.	189
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↓	GOLUB ET AL., "Matrix Computations," 3 rd Edition, The Johns Hopkins University Press, Baltimore, MD, pp. 201-202. (1996).	191
/JATM/	GRAY, "Toeplitz and Circulant Matrices: A Review," available at http://ee.stanford.edu/~gray/toeplitz.pdf	192

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/JATM/		HAYKIN, "Adaptive Filter Theory", Third Edition, Prentice Hall, 1996, pp. 87-93,	193
		KAY, "Fundamentals of Statistical Signal Processing: Estimation Theory," Prentice Hall, New Jersey, XP002428399, (1993). pages 391-392	194
	*	MEYR ET AL., "Digital Communication Receivers: Synchronization, Channel Estimation, and Signal Processing," Wiley Interscience, New York, XP002428398, pp. 700-747, 782-789, (1998), pages 700-717	195
		SINN ET AL., "Efficient Data Detection Algorithms in Single and Multi-Carrier Systems Without the Necessity of a Guard Period," page 2739, left-hand column, figure 2.	196
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	↓	VOLLMER ET AL., "Joint-Detection using Fast Fourier Transforms in TD-CDMA based Mobile Radio Systems". 1999 (XP-002190679)	199
/JATM/		WILLIAMSON ET AL., "Block Decision Feedback Equalization," IEEE Transactions on Communications, IEEE Service Center, Piscataway, New Jersey, vol. 40, no. 2, pp. 255-264, (February 1, 1992).	200

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